DOCUMENT RESUME

ED 102 685 EA 006 806

TITLE	Massachusetts Taxes: A Factual Guide to Future Action.
INSTITUTION	Massachusetts Advisory Council on Education, Boston.; Massachusetts Taxpayers Foundation, Boston.
PUB DATE	Dec 74
NOTE	29p.
EDRS PRICE	MF-$0.76 HC-$1.95 PLUS POSTAGE
DESCRIPTORS	Graphs; *Property Taxes; *School Taxes; Tax Allocation; *Taxes; *Tax Rates
IDENTIFIERS	*Massachusetts

ABSTRACT

Without making recommendations, this pamphlet compares Massachusetts taxes with those of other States, projects major tax revenues, compares growth experience of major taxes, considers the incidence of various taxes on high and low income groups, examines recent tax legislation, shows what revenues could be expected with changed tax rates, and provides illustrations of the changes in individual taxes that would result from changed rates and broadened tax bases. (Author/DW)

Massachusetts Taxes:

A Factual Guide to Future Action

December 1974

A Study for the
Massachusetts Advisory Council on Education
182 Tremont Street
Boston, Massachusetts 02111

From

Massachusetts Taxpayers Foundation, Inc.
145 Tremont Street
Boston, Massachusetts 02111

The Massachusetts Advisory Council on Education is an independent state agency created by special legislation (General Laws, Chapter 15, Section 1H) for the purpose of recommending policies designed to improve the performance of all public education systems in the Commonwealth. As such the Advisory Council provides support for studies which will recommend policies promoting and facilitating the coordination, effectiveness, and efficiency of these systems.

Study Advisory Committee

Allan S. Hartman, *Massachusetts Advisory Council on Education*

Ramona K. Hilgenkamp, *Executive Office of Educational Affairs*

George Hill, *Massachusetts Association of School Superintendents*

Alfred A. Maffeo, *Massachusetts Association of School Committees*

Catherine Minicucci, *Office of the Commissioner of Education*

Charlotte Ryan, *Massachusetts Congress of Parents, Teachers & Students*

Kennedy Shaw, *Massachusetts League of Cities and Towns*

Raymond G. Torto, *University of Massachusetts, Boston*

Felix J. Zollo, Jr., *Massachusetts Teachers Association*

Study Staff

Lyman H. Ziegler, *Study Director*

Marlene B. Simpson, *Research Associate*

Economic Consultants

Raymond G. Torto

Timothy F. Greene

Contents

Preface

Educators need a primer on taxes! While this statement may sound critical of the indifference or lack of knowledge of some educators to the tax consequences of their proposals, what needs focusing is the future. A major question for educators — especially for those concerned with reforms in the financing of schools — must be . . .

Where are the monies to come from to pay the increased costs of schools?

This study report of the Massachusetts Taxpayers Foundation should go a long way in helping educators become familiar with the various types of taxes and their revenue potentials. It should also help to develop a better understanding of the various effects of these taxes. This alone would make it valuable.

But this report can also be of equal value to non-educators. To legislators . . . members of the Executive branch . . . lay groups . . . the media . . . citizens at large, this report can be a handy reference tool. It can be a textbook in instructing those unfamiliar with Massachusetts tax-revenue relationships about the history and present status of the Commonwealth's tax situation. It can be a reference tool for those involved in recommending or supporting various financial proposals as well as those whose support may be asked. In short, this MACE report can help refine judgments.

Finally, this report should be read in conjunction with two other MACE studies. Both the report of the Governor's Commission on School District Organization and Collaboration and a MACE sponsored survey on the financing of public education in Massachusetts have recommended that:

"All future attempts at School Aid Reform Should Be Pursued in Relation to the Total Municipal-State Financing Picture, Not as an Action Focused Solely on Educational Service Interests."

Putting this together . . . the clear direction of these studies is towards viewing the Commonwealth's financial picture in its totality rather than its parts. At the very least, this would seem to promise improved dialogue between the educational community and the general public.

It is the Advisory Council's hope that this study will also facilitate such a dialogue. Whether it does or not, the Council would appreciate whatever feed-back readers are willing to give as to the usefulness of his report.

Allan S. Hartman
Associate Director
Advisory Council on Education

Foreword

This pamphlet is a response to the expressed need for facts to guide a legislator or layman seeking new or what he might consider fairer sources of public revenue. It is intended as a reference book or digest of pertinent information. It attempts to deal simply — perhaps too simply — with a very complicated subject.

Under the terms of the Foundation's agreement with MACE, every effort has been made to avoid bias. The pamphlet makes no recommendations. Judgments are left to the reader.

The pamphlet does not provide all the answers. *It does:*

- Compare Massachusetts with other states in terms of economic competition, showing how far our taxes may be in or out of step with those elsewhere;
- Project revenues from the major taxes on the basis of past performance;
- Compare the growth experience of the major taxes;
- Consider the incidence of various taxes on high and low income groups;
- Examine recent tax actions by the Legislature;
- Show approximately what revenues could be expected by changing the rates of various taxes or broadening their bases;
- Conversely, provide illustrations of changes in individual taxes or combinations of taxes which would yield assumed amounts of new revenue for local aid and corresponding property tax relief.

The pamphlet *does not:*

- Deal at any length with non-tax revenues such as federal grants, service charges and fees;
- Consider the difficulties of administering and enforcing various taxes and the costs of their collection;
- Examine the several tax incentives recently adopted by the Legislature to promote industrial growth (a summary of these legislative actions is available from Jobs for Massachusetts, Inc.);
- Describe the "reciprocity" provisions of certain taxes (e.g., income taxes, insurance taxes) which tend to impose uniformity of rates among states.

No consideration is given here to a statewide property tax at a uniform rate, as originally proposed by the Master Tax Plan Commission in 1970. This was not intended by the Commission as a source of additional revenue; indeed, the plan was to reduce property taxes in total by some 25 percent, but to equalize their unequal burden among cities and towns. To make up the loss of property tax revenues, the Commission suggested a much greater reliance on sales taxation and slightly greater use of the individual income tax.

The Master Tax Plan Commission has recently been revived and extended in order to complete its final report and recommendations.

Spending and Taxes

The relatively high taxes levied by state and local governments in Massachusetts reflect an historically high level of government spending. Since the first Census Bureau reports on public finances, in 1932, Massachusetts expenditures per capita for state and local governments have consistently ranked among the highest states, as indicated in the table below:

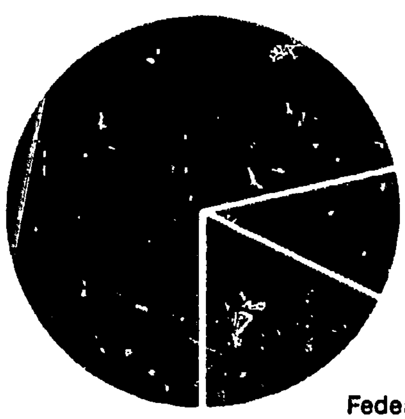
Per Capita Direct State-Local General Expenditures
(Excluding capital outlays except in 1932)

Rank	1932		1962		1971		1973	
1	Nev.	$131	Alaska	$377	N.Y.	$879	Alaska	$1,473
2	N.J.	130	Wyo.	319	Hawaii	838	N.Y.	1,090
3	N.Y.	128	Calif.	318	Calif.	780	Hawaii	961
4	Calif.	114	Nev.	314	Wyo.	726	Calif.	904
5	Wyo.	105	N.Y.	305	Nev.	720	Wyo.	865
6	Del.	104	Ore.	297	Del.	677	Nev.	858
7	Ariz.	99	Colo.	288	Wash.	655	Wash.	826
8	MASS.	96	Hawaii	287	MASS.	650	MASS.	820
9	Wash.	96	N.D.	280	Mich.	635	Del.	816
10	Wisc.	91	Wash.	280	Vt.	631	Vt	787
11	Ore.	88	MASS.	277	Wisc.	625	Minn.	783

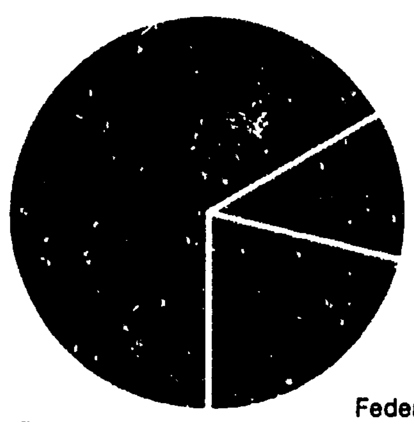
Source: U S. Census Bureau

Also contributing to the high level of Massachusetts taxes is the state's minimal dependence on miscellaneous non-tax revenues and federal grants. In 1972-73, taxes accounted for 70.8 percent of all Massachusetts state and local government revenues. Connecticut was the only state that relied more heavily on taxes than Massachusetts. For the entire country, taxes provided 63.7 percent of total state and local revenues in 1972-73.

1972-1973
Massachusetts



United States

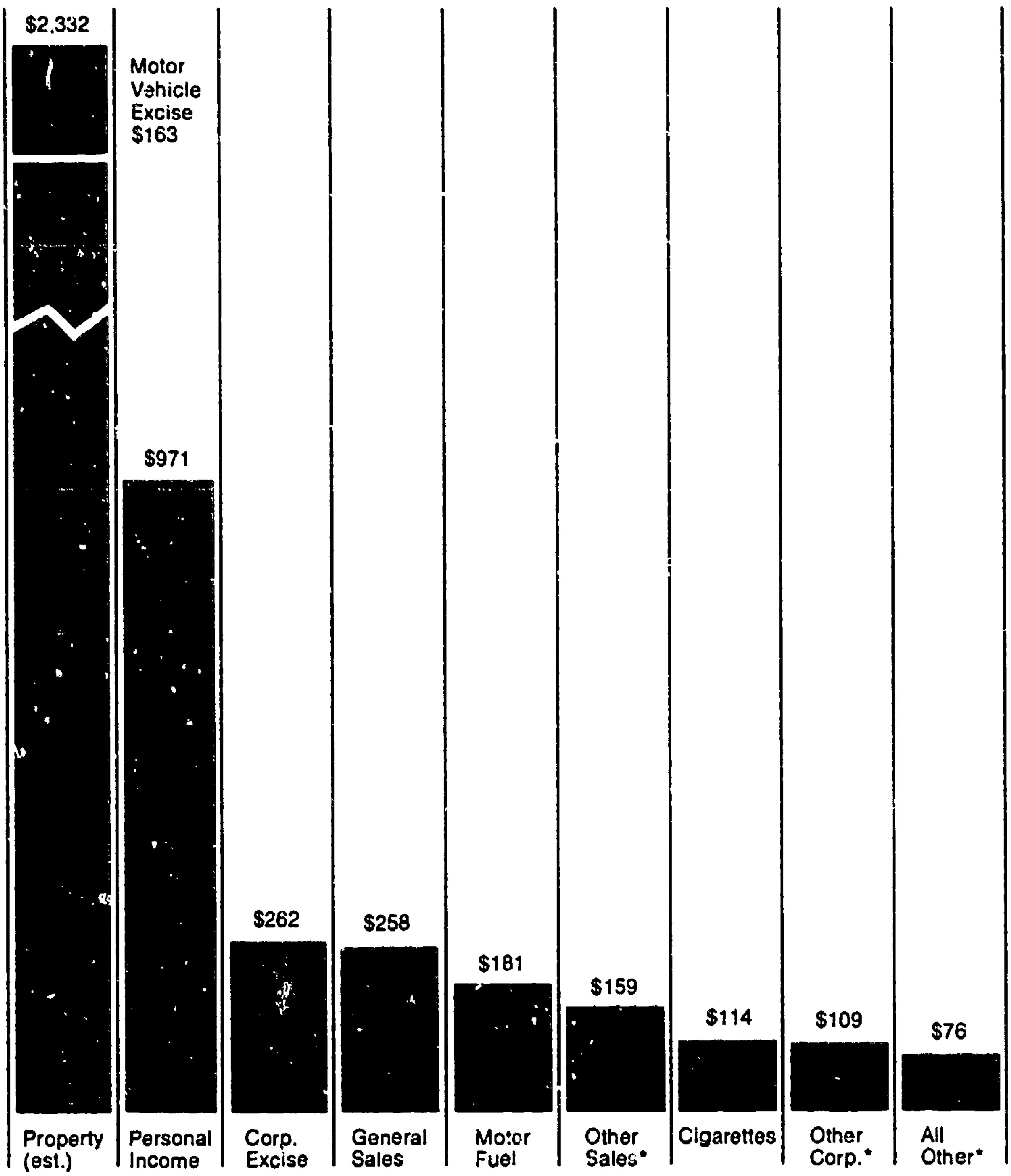


Source: *Governmental Finances in 1972-73,* Table 17

The Massachusetts Tax Mix

BEST COPY AVAILABLE

Major sources of state and local tax revenue in Massachusetts 1973-1974 (in millions of dollars)



*Other sales: (alcoholic beverages, meals, room occupancy, state racing); Other corporations: (insurance, commercial banks, savings institutions, public utilities); All other: (inheritance, estate, deeds, miscellaneous).

Source: Office of the State Comptroller; State Tax Commission

Comparisons with Other States

Fees, Charges and Miscellaneous Revenues

Nation-wide, 19.8 percent of all state and local general revenues in 1972-73 came from miscellaneous non-tax sources, compared with 13.4 percent in Massachusetts — the lowest of all the states.

These miscellaneous non-tax sources include charges or assessments for services, fees, rents, tuitions, sales (not including liquor stores or municipal utilities), tolls, betterments, and the like.

In total, Massachusetts and its local governments currently raise over a half billion dollars from such sources. In 1972-73, they produced $110 per capita compared with a national average of $142.

Undoubtedly a fuller development of this wide assortment of revenue sources could produce significant amounts of added revenue in lieu of additional taxes. The sheer number and diversity of these assessments, fees and charges, however, has discouraged their fuller use — further complicated by considerations of equity, difficulties of administration, cost limitations, and even constitutional restraints.

... and local charges and miscellaneous ...ues as a percentage of total general ...ue in 25 largest states: 1972-1973

(Non-tax general revenue as a percentage of total)

Alabama	29.22%
Louisiana	27.78
Washington	26.49
Georgia	25.97
Tennessee	24.98
Texas	24.56
Kentucky	23.16
Florida	22.54
Ohio	22.23
Minnesota	21.94
Indiana	21.76
Iowa	20.63
Michigan	20.55
Maryland	20.01
Virginia	19.90
North Carolina	19.23
Wisconsin	18.24
Missouri	18.02
California	17.48
New Jersey	16.84
New York	16.76
Pennsylvania	14.91
Illinois	14.50
Connecticut	13.46
MASS.	13.37

Source: *Governmental Finances in 1972-73*, Table 22

Comparisons with Other States

All Taxes

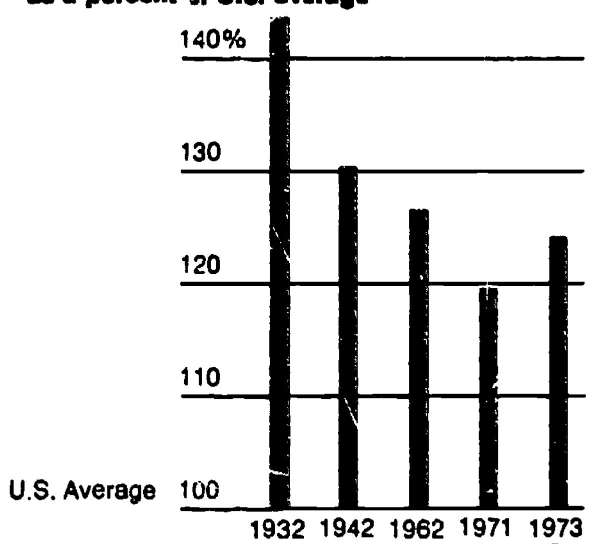
An initial consideration in the development of any tax program is the present high level of Massachusetts taxes in relation to the state's population and income.

Massachusetts ranked 4th among the states in 1972-73 in *total state and local taxes per capita*, exceeded by New York, California and Connecticut. Since 1932 the state has always ranked between 3rd and 6th by this measure of tax effort.

For almost 40 years after 1932, per capita taxes rose faster in other states than in Massachusetts. In 1932, Massachusetts exceeded the national average by 43%; by 1971 this margin had dropped to 18%. The latest (1972-73) figures show a pronounced reversal of this trend, the margin over the national average rising to 24%.

Massachusetts ranked 6th in 1972-73 in *total taxes per $1,000 of personal income*, exceeded by New York, Vermont, Wisconsin, Minnesota and California in declining order.

Massachusetts state and local taxes per capita as a percent of U.S. average



Source: *Governmental Finances in 1972-73*, Table 22

The high aggregate level of Massachusetts taxes in relation to the state's resources has meant above-average rates for most state and locally assessed taxes. Correspondingly, it requires closer attention to the interstate aspects of tax competition.

State and local total taxes as a percentage of total personal income in 25 largest states: 1972-1973

New York	16.23%
Wisconsin	14.78
MASS.	14.19
California	13.99
Minnesota	13.73
Connecticut	12.80
Pennsylvania	12.19
Michigan	12.08
Louisiana	12.02
Maryland	12.00
Washington	11.80
New Jersey	11.24
Illinois	11.22
Iowa	11.08
Florida	10.70
Kentucky	10.59
North Carolina	10.49
Georgia	10.43
Virginia	10.38
Missouri	10.34
Tennessee	10.10
Indiana	10.07
Ohio	9.86
Texas	9.75
Alabama	9.59

Source: *Survey of Current Business*, August 1974, Tables 4-63.
Governmental Finances in 1972-73, Table 17

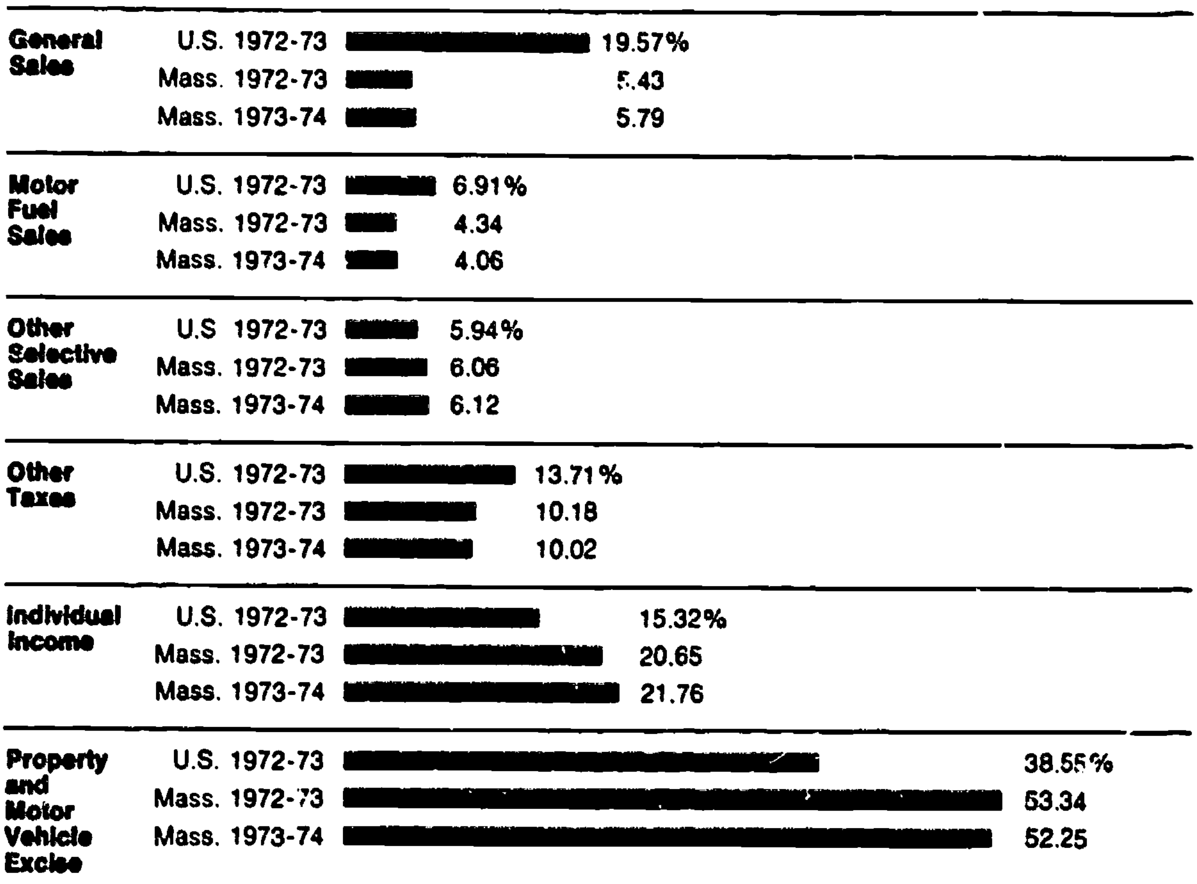
Property and personal income carry a much larger share of the tax burden in Massachusetts than in the country as a whole.

Massachusetts obtains a little over half of its state and local taxes from the local property tax (including the excise on motor vehicles) as compared with about 40 percent for the 50 states combined.

The personal income tax in Massachusetts similarly carries an above-average share — over 20 percent — compared with a 50-state total of 15.3 percent.

Taxes based on sales — general or selective — are relatively little used, totaling only 16 percent of all taxes. For 50 states, the sales-based share was 32.4 percent.

The 10 percent share borne by all other taxes in Massachusetts is somewhat below the combined 50-state figure.



Source: *Governmental Finances in 1972-73*, Table 4
Office of the State Comptroller

Comparisons with Other States

Property Taxes

BEST COPY AVAILABLE

The Massachusetts general property tax is the nation's highest by most measures:

In relation to population it stood first in 1972-73 — the latest census — with $358 per capita, followed closely by Connecticut, New Jersey and California. The United States average was $216 per capita.

In relation to personal income it also stood first in 1972-73. Massachusetts property taxes of $74.11 per $1,000 of personal income far exceeded the national average of $46.41.

In relation to the value of taxed property, it stood first for single-family homes, according to FHA statistics, as shown in the table below. For farm real estate it also stood first, according to 1971 figures of the U.S. Department of Agriculture. For other residential and business property, no dependable information is available.

Average property tax per $1,000 of sales price of existing FHA-financed single homes in 20 highest states: 1972

Rank	State	
1	MASSACHUSETTS	$33.79
2	New Jersey	33.30
3	New Hampshire	32.92
4	Nebraska	32.89
5	Wisconsin	32.47
6	Iowa	28.54
7	New York	28.29
8	California	27.56
9	Colorado	27.09
10	Vermont	26.92
11	South Dakota	26.75
12	Connecticut	26.38
13	Maine	24.74
14	Maryland	24.48
15	Oregon	24.06
16	Illinois	23.29
17	Kansas	22.76
18	Rhode Island	22.65
19	Michigan	22.27
20	Indiana	21.70
	50 States	21.14

Comparisons with Other States

Income Taxes

BEST COPY AVAILABLE

The Massachusetts income tax stands alone among state-collected taxes as a revenue producer, raising almost as much as all other taxes together. This has not always been so. As recently as 1966 the income tax accounted for only 35 percent of state tax collections, compared with the present 47 percent. It has been the favored source of additional tax revenue at recent legislative sessions (see page16), and by recent governors.

Personal income taxes in fiscal 1972-73 were levied by state or local governments in 47 states, according to the Census Bureau, and in significant amounts by over 40 states. Only Nevada, Texas and Wyoming reported no income taxes.

Among the 47 income tax states, Massachusetts ranked 5th in the relative weight of its income taxes, using as a measure tax collections as a percent of total reported personal income in each state. All of the four states exceeding Massachusetts' 3.88% measure were major industrial states.

Among the six New England states, Massachusetts ranked first in the weight of its income taxes according to this same measure.

The Six New England States:

Massachusetts	3.88%
Vermont	3.22
Rhode Island	2.17
Connecticut	1.08
Maine	1.04
New Hampshire	0.76

State and local income taxes as a percentage of total personal income in 25 largest states: 1972-1973

New York*	4.85%
Wisconsin	4.21
Minnesota	4.11
Maryland*	3.93
MASS.	3.88
Pennsylvania*	3.59
Michigan*	3.03
North Carolina	2.67
California	2.53
Kentucky*	2.47
Virginia	2.42
Iowa	2.09
Missouri*	2.05
Georgia	2.01
Illinois	1.83
Ohio*	1.77
Alabama*	1.52
Louisiana	1.34
Indiana	1.19
Connecticut	1.08
Tennessee	0.74
New Jersey*	0.50
Florida	0.42
Washington*	less than 0.01
Texas	NONE

*Includes local income taxes

Source: *Governmental Finances in 1972-73*, Table 17

Survey of Current Business, August 1974, Tables 4-63

Comparisons with Other States

Sales Taxes

Every state relies on the taxation of sales (or gross receipts from sales) for a substantial portion of its revenue. In 45 states a general sales or gross receipts tax is combined with a number of "selective" sales taxes — most often on sales of gasoline, cigarettes, alcoholic beverages and insurance. The remaining five states — Alaska, Delaware, Montana, New Hampshire and Oregon — use only selective sales taxes.

Several of the general sales or gross receipts taxes cover a broad range of sales of property and services — for example, utilities, amusements, repair services, personal services (page 19). The Massachusetts "limited" sales tax is the narrowest-based of all the general taxes, applying only to retail sales of tangible personal property and omitting the major categories of food and lower-priced clothing.

A rough measure of the extent of each state's reliance on taxes of the sales or gross receipts type is gained by comparing the taxes collected with total sales of retail establishments *plus* personal income derived from "service" industries. By this measure, Massachusetts ranked 45th among the states.

State and local sales tax revenues per $1000 of retail sales and services in 25 largest states: 1971-1972

Washington	$131
Louisiana	101
Alabama	100
New York	97
Connecticut	93
Kentucky	93
Tennessee	92
Florida	87
Illinois	84
Georgia	81
North Carolina	80
California	79
Texas	78
Virginia	78
Michigan	77
Pennsylvania	77
Wisconsin	71
New Jersey	71
Minnesota	69
Ohio	66
Indiana	65
Missouri	63
Maryland	63
Iowa	57
MASS.	51

Sources: *Compendium of Government Finances*, 1972, Table 46
Sales Management, July 23, 1973, Table B-6
Survey of Current Business, August 1974, Tables 4-63

Comparisons with Other States

Business Taxes

BEST COPY AVAILABLE

State and local governments tax business in a variety of ways. For tax purposes, no two states classify businesses in the same way. Massachusetts has a general corporation tax (excise) on business and manufacturing corporations — a catch-all for corporations not included in a special category — and categorical taxes on savings institutions, commercial banks, interstate corporations, public utilities, and insurance companies. The Massachusetts classification is unique, as is the form of several of its business taxes. Accordingly, direct tax comparisons with other states are difficult to make and hazardous.

Further complicating interstate comparisons are major differences among the states in their treatment of corporate business under local property taxes and state and local sales taxes.

Attempts to compare the states in their treatment of business fall under three headings:

1. The *aggregate method*, used by the Advisory Commission on Intergovernmental Relations in a 1971 study. The Commission compared total state and local taxes (except unemployment and sales taxes) paid by all incorporated business with total personal earnings from business sources taken as a rough measure of total business activity in each state.

Based on the ACIR index, Massachusetts ranked 6th among the 14 largest states in the burden of its business taxes.

2. *Industry comparisons*, within the limitations of available information.

A 1970 study of *electric utility* taxes, for example, found that Massachusetts ranked second after New York among the 14 largest states in total state and local taxes per $1,000 of net plant investment (N.Y. $58; Mass., $56; U.S. median, $33).

A number of studies have been made of taxes on *manufacturing*. Generally they hypothesize industries of various categories located in various assumed locations, comparing the calculated total of state and local taxes on each hypothetical industry in each location.

As a rule, Massachusetts taxes on industry, compared with some other states, have been found to fall in a middle to upper-middle range.

A 1972 study by the Pennsylvania Economy League, for example, covered 11 states and hypothetical firms in 10 major industrial classifications, based on 1971 tax laws and average property assessment ratios. Massachusetts was found to rank 4th among the 11 states in one industry, 5th in five industries and 6th in four industries. Other states in the comparison included Delaware, Indiana, Illinois, Maryland, Michigan, New Jersey, New York, Ohio, Pennsylvania and West Virginia.

3. *Individual Tax Comparisons* are hazardous because they do not provide a complete picture of tax burden. This type of comparison has most often been used for corporation income tax rates.

A comparison of 1971 *unemployment taxes*, for example, found that Massachusetts ranked third among the 14 largest states (New Jersey 1.1% of total wages in covered employment; California 1.1%; Massachusetts 0.9%).

Business taxes as a percent of personal income from business sources: 1971

Rank	State	Percent
1	California	5.9
2	Wisconsin	5.5
3	Texas	5.2
4	New York	5.1
5	Michigan	4.4
6	MASSACHUSETTS	4.4
7	Pennsylvania	4.0
8	North Carolina	4.0
9	Ohio	3.6
10	New Jersey	3.5
11	Indiana	3.4
12	Illinois	3.2
13	Missouri	3.0
14	Florida	2.7
	United States	4.5

Criteria in Tax Selection

Incidence

BEST COPY AVAILABLE

Of primary concern in the selection of tax sources is the distribution of the burden of each tax. This is commonly called its "incidence." Usually a tax is judged as fair or unfair depending on how it affects people at various income levels. If a tax is an equal fraction of income at all levels, it is said to be proportional. If it represents a greater share of income as income rises, it is progressive. If it represents a smaller share, it is regressive.

Complicating the picture, incidence is very difficult to measure for some kinds of tax — the corporation excise, for example, which can be shifted to others in various ways.

The *Massachusetts Income Tax* is slightly progressive in its incidence and normally is not shifted by the taxpayer to anyone else. Its flat rates — 5% and 9% — would make it a proportional tax, except for the exemptions and deductions which benefit lower income taxpayers, and the higher 9% rate on unearned income, especially capital gains, which hits high-income taxpayers relatively harder. The resulting progressivity is shown in the table below. However, after allowing for deductions of the state income tax from federal tax bills, the Massachusetts tax becomes proportional or mildly regressive as shown in the last column of the table.

Average Massachusetts effective income tax rates for selected income classes

1973 Income class	1973 Average income	Effective state income tax rate	Effective state income tax rate after deduction from Federal income tax
$0-5,000		0.0%	0.0%
$5,300-6,600	$5,991	2.6	2.6
$8,000-9,300	$8,767	2.9	2.9
$10,600-12,000	$11,263	3.1	2.8
$13,000-20,000	$16,084	3.7	2.9
$26,000-33,000	$30,468	4.5	3.1
$40,000-66,000	$53,841	5.1	2.8
$130,000-300,000	$214,754	6.3	2.3

Source: Edward Moscovitch, "State Graduated Income Taxes — A State-Initiated Form of Federal Revenue Sharing," *National Tax Journal*, March, 1972, p 56.

Sales and excise taxes are paid directly by consumers. Unless offset by income tax credits for low-income families, they are regressive since as income rises a smaller proportion of it is spent on goods and services covered by these taxes. In Massachusetts the regressivity of the general sales tax is minimized by excluding sales of food and most clothing. In 1967 Massachusetts families with incomes below $3,000 paid 2% of their income for sales and other consumption taxes. Families earning $4,000 paid about 2.5% while those making $15,000 paid only 1.5%.

Unlike the other taxes considered above, the *property tax* need not be borne by the statutory taxpayer. While the property tax on land is paid by landowners, the tax on structures can be shifted by several mechanisms. Rates of return on all capital may be reduced, shifting some of the burden to owners of other capital. A reduced supply of housing at a higher price allows a shift of some of the burden to tenants and consumers of goods produced in buildings. Among tenants, a declining proportion of income is spent on housing as income rises, forcing lower-income tenants to contribute a larger share of their income to their landlords' property taxes.

The property tax can thus be shifted to capital in general or to tenants and consumers. If the former possibility is assumed, the tax is proportional, while in the latter case it is regressive. The following table illustrates the two cases for a nationwide sample of taxpayers.

Effective property tax rates as percentage of income

Income	Case 1: Tax shifted to property income in general	Case 2: Tax on structures shifted half to shelter and consumption, half to property income in general
$0-3,000	2.5%	6.5%
$3,000-5,000	2.7	4.8
$5,000-10,000	2.0	3.6
$10,000-15,000	1.7	3.2
$15,000-20,000	2.0	3.2
$20,000-25,000	2.6	3.1
$25,000-30,000	3.7	3.1
$30,000-50,000	4.5	3.0
$50,000-100,000	6.2	2.8
$100,000-500,000	8.2	2.4
$500,000-1,000,000	9.6	1.7
$1,000,000 and over	10.1	0.8
all classes	3.0	3.4

Source: Joseph Pechman and Benjamin Okner, *Who Bears the Tax Burden?*, The Brookings Institution, Washington, D.C., 1974, p. 59, Table 4-8

Though there is debate about the regressivity of the property tax, recent theoretical work seems to imply that the American property tax will be shifted to tenants.[1] In any case, in high-tax areas such as Massachusetts, the tax will be shifted forward to tenants.[2]

The corporate excise can be shifted in several ways. A mechanism of capital flows and reduced rates of return similar to that described for the property tax allows shifting of the burden to owners of other capital.

Goals other than profit-maximization can lead corporations to shift the tax forward to consumers in the form of higher prices. If the first case is assumed to exist, the tax is progressive, while if the second case holds, both the rich and the poor are taxed at a higher rate than middle-income taxpayers.

Regressivity of sales and property taxes can be offset by providing rebates for tax payments in the form of credits on the state income tax. However, since individuals must file tax returns to get credits, many poor who do not file lose sales tax rebates currently available under Massachusetts law. Similar refunds for property tax payments, usually limited to specific groups and to payments in excess of some fraction of income, are provided by circuit-breaker laws in numerous states. If designed to apply to all low-income people including tenants, such a law could relieve some of the burden of the property tax on the poor, depending, however, on the source of revenues used to replace their property taxes.

[1] Dick Netzer, "The Incidence of the Property Tax Revisited," *National Tax Journal*, Dec. 1973, 26(4), pp. 515-35

[2] Peter Mieszkowsky, "The Property Tax: An Excise Tax or a Profits Tax?", *Journal of Public Economics*, 1 (1), 1972, pp. 73-96

Criteria in Tax Selection

Growth Potential

BEST COPY AVAILABLE

The chart on the following page illustrates the growth of the bases of several major taxes within the period 1949 to 1974. The base figures were calculated for each tax by dividing total net collections* by the current tax rate.

Clearly, of the major tax sources, taxable earned income — salaries, wages and business income — stands alone in the rapidity of its growth, increasing almost 5,000% in 25 years. This extremely rapid growth has resulted mainly from the high personal exemptions — $2,000 for the taxpayer, $500+ for a spouse, etc. In 1949, personal exemptions for the average family exceeded family income so that only an upper-income minority paid the tax at all; in 1974, however, average family income exceeded the exemptions by several times. Elimination of the deductibility of federal and state taxes further broadened the base of the tax and added to its progressivity.

In recent performance (1967-1974), unearned income and taxable sales have ranked second and third in growth, as shown in the following table. For the longer period (1956-1974) for which property tax data are available, the growth of locally taxable property values ranked second among the taxes shown in the table:

* Minor variations result from year-end acceleration or delays in processing taxes.

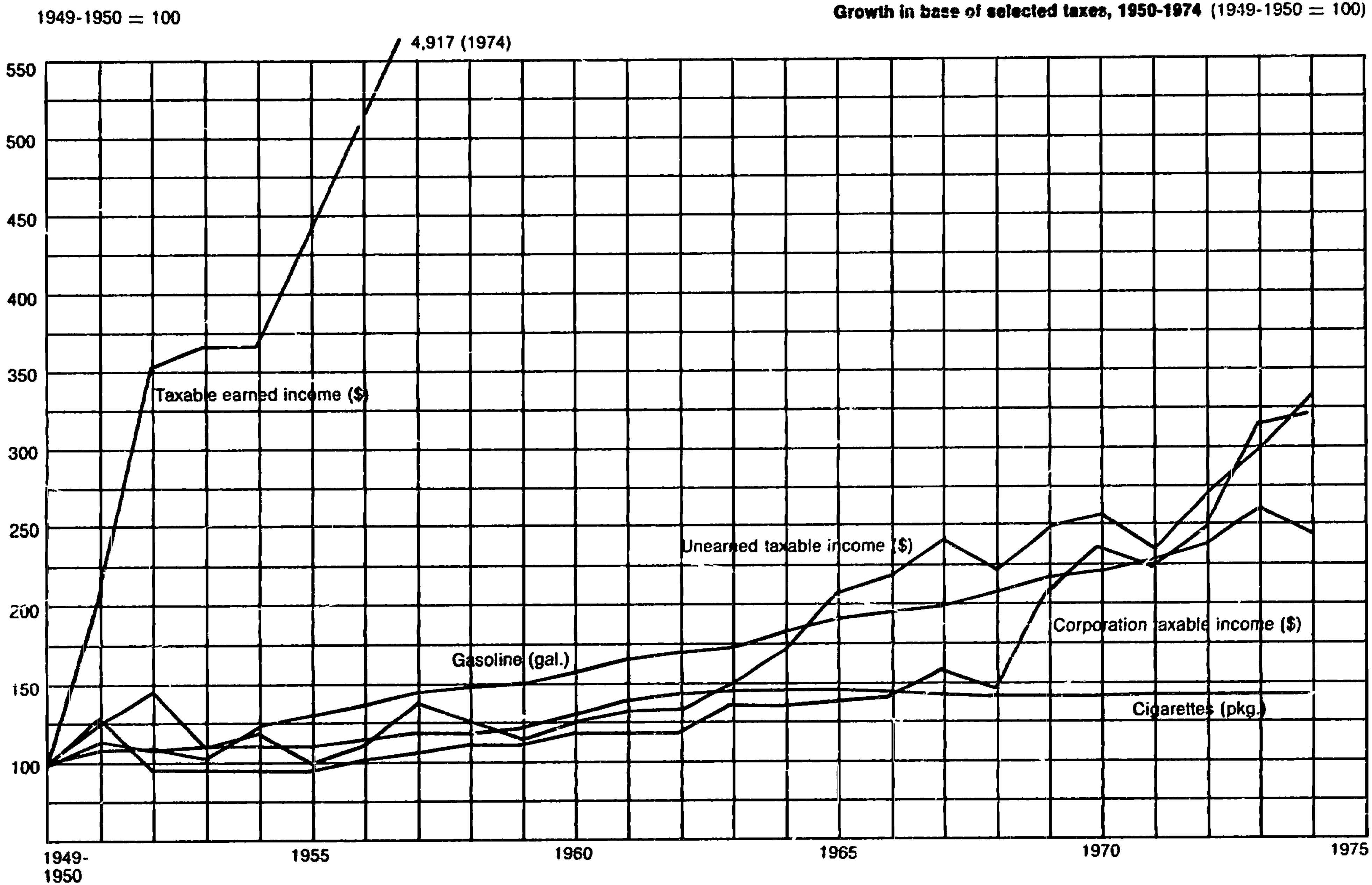
Average annual increase

Taxable Base	1949 to 1974	1956 to 1974	1967 to 1974
Earned Income	24.4%	14.4%	15.2%
Unearned Income	5.5	7.4	10.9
General Sales	—	—	10.6
Corporation property	n.a.	5.5	6.0
Corporation income	5.5	7.4	5.6
Local property	—	8.8	—
Gasoline	3.8	3.4	2.9
Cigarettes	1.2	1.4	-0.2

The rapid growth of taxable property values in the cities and towns occurred despite some narrowing of its base. Only two acceptable estimates of full (equalized) property values exist. In 1956 a special commission used new data and techniques to reach an estimate of $16,829 million. In 1974 the State Tax Commission has again constructed new values, using both sales and appraisal techniques, totaling $57.776 million — an 18-year growth in the property tax base of 243 percent.

Predictably, the two taxes based on quantity rather than value of sales — gasoline and cigarettes — failed to respond directly to inflation and accordingly showed the slowest growth. An *ad valorem* tax on gasoline would probably have shown the fastest growth of any of the major taxes except the earned income tax.

Growth in base of selected taxes, 1950-1974 (1949-1950 = 100)



Criteria in Tax Selection

BEST COPY AVAILABLE

Federal Deductibility

A final consideration in the selection of tax sources is the deductibility of a state or local tax on federal tax returns.

When a taxpayer deducts a tax on his federal tax return, he reduces his federal tax. In effect, the net cost to him of the state or local tax is reduced at the expense of the federal government. The higher his federal income tax bracket, the more of his state tax he is able to shift away. If, on the other hand, the individual uses the standard deduction, or if he pays no federal income tax at all, then deductibility is of no value to him and he pays the full cost of the tax.

Deductibility is obviously an advantage for the state or for a city or town, to the extent that it shifts the tax burden to the federal government. Its ultimate effect, however, is to add regressivity to the state and local tax structure since it primarily benefits persons with high incomes.

The major taxes are deductible on individual federal tax returns:

Property tax (including personal property)
Motor vehicle excise
Income tax
Sales tax
Gasoline tax

Minor taxes, benefit assessments, fees and charges are not deductible; for example:

Inheritance tax
Alcoholic beverage taxes
Meals tax
Cigarette tax
Sidewalk assessments
Driver's license fees

Because of deductibility, paying for a public service (e.g., sewers) through taxes may be preferable to paying for them through service charges (e.g., a sewer rental charge).

State and local taxes are also deductible by corporations on their federal tax returns, again shifting part of this burden to the federal government.

Criteria in Tax Selection

Other Considerations

BEST COPY AVAILABLE

In addition to the factors of incidence, growth potential, and federal deductibility, which have already been discussed, tax experts recognize several other considerations which may be important in choosing between tax sources. They include:

1. *Ease of collection and enforcement* — (No reliable data are now available as to the costs of collection of present Massachusetts taxes or as to the extent to which they may be evaded or avoided);

2. *Stability and predictability of revenue yield;*

3. *Taxpayer awareness* — as between the more or less direct tax on the individual with its political implications, and the hidden tax which he pays through increased prices of goods or services;

4. *Neutrality* — an economist's term, measuring the extent to which a tax distorts the normal workings of the market (e.g., a general sales tax is neutral compared with a selective sales tax because it raises all prices for goods proportionally and therefore doesn't influence consumer choices between goods);

5. *Certainty* — as to who will end up paying for the tax or what the likelihood is of evasion.

Considering all of the criteria, it is obvious that no tax will be satisfactory on every count. The income tax, for example, may be costly to collect and difficult to enforce while at the same time it may be equitable in its incidence, visible to the taxpayer and responsive to economic growth.

Recent Tax Actions by the Legislature

BEST COPY AVAILABLE

The ten years since 1965 have seen major changes in the Massachusetts tax structure, beginning with passage of the "limited sales tax" in 1966.

The principal tax enactments of the Legislature were these:

1966

Chapter 14

New taxes:

Limited retail sales tax @ 3%

Room occupancy tax @ 5%

Interstate corporation income @ 3.075%

Increases:

Alcoholic beverages excise — average 30% increase

Cigarettes, 10¢ to 12¢ per package

Savings banks, base revised and income tax added @ 0.5%

Commercial banks, rate pegged to general corporation rate

1967

Chapter 796

Increases:

Personal income tax (Business income, 3.075% to 4%; "unearned" income, 7.38% to 8%)

Corporation excise (income measure, 6.765% to 7.5%; property measure, $6.15 to $7 per $1,000)

1968

Chapter 566

Increase:

Personal income tax, reduce federal tax deduction by ½

1969

Chapter 361

Increase:

Cigarettes, 12¢ to 16¢ per package

Chapter 546

Increases:

Personal income tax, eliminate all federal and state tax deductions

Other taxes, 14% surtax added to most taxes except income, sales, cigarettes and gasoline

Chapter 660

Revisions:

Inheritance tax rates revised

1970

Chapter 634

Decrease:

Corporation excise, provide 1% investment credit and automatic rollback of property rate based on increased yield of the excise (rate reduced from $7.98 to $5.76 per $1,000 in 1974)

1971

Chapter 497

Increase:

Gasoline, 6.5¢ to 7.5¢ per gallon

Chapter 555

New taxes:

Domestic insurance companies, 1% of gross investment income

Personal income tax (savings bank interest @ 5%; rental income @ 5%)

Increases:

Corporation excise and savings bank excise, eliminate deduction of prior year's Massachusetts tax

Personal income tax (business income, 4% to 5%; "unearned" income, 8% to 9%)

(also general revisions adopting certain federal definitions)

Public utilities, 5.7% to 6.5%

1972

Chapter 746

Decrease:

Corporation excise, increase investment credit, 1% to 3%

State-Local Tax Projections

BEST COPY AVAILABLE

Forecasts of revenues from the principal state and local taxes for 1976, 1978 and 1980 have been made for this study, using appropriate statistical techniques.* They are based on a 20 year record of past performance (1953 to 1972).

Unlike the growth rates described above, which compared the growth of the tax *bases* of major taxes — e.g., income earned, cigarettes sold — these forecasts are based on actual revenue experience with major taxes and the total tax structure. They show what Massachusetts tax revenues might be during the remainder of this decade if the tax and spending policies of recent years are continued.

Three assumptions are used as to the future growth of personal income:
Case 1. Low growth (4.8% — the 1969-71 average);
Case 2. Moderate growth (9.8% — the 1966-72 average);

Case 3. High growth (11.2% — the 1963-68 average);

The forecasts also assume that the average rate of population growth between 1963 and 1973 (0.71% per year) will continue.

The results are summarized in the following table:

Actual and projected tax collections (in millions of dollars)

	Income Tax	Property Tax	Real Property Tax	Sales Tax	Cigarette Tax	Total Tax Revenue
1972 (actual)	$ 743.6	$2,024 7	$1,695.9	$200.3	$105.0	$3,986.8
1974 (actual)	971.0	NA	NA	258.2	114.4	NA
Case 1						
1976	879.3	2,203.2	1,859.2	283.6	117.8	4,721.5
1978	984.7	2,451.1	2,076.2	311.5	121.2	5,288.9
1980	1,106.4	2,723.6	2,317.8	342.1	124.7	5,916.3
Case 2						
1976	1,072.2	2,595.4	2,215.6	311.3	121.3	5,670.5
1976	1,357.4	3,202.8	2,760.0	375.3	128.5	7,111.8
1980	1,665.1	3,983.3	3,419.7	452.4	136.2	8,859 2
Case 3						
1976	1,129.6	2,712.0	2,321.6	319.3	122.3	5,952.5
1978	1,471.8	3,435.2	2,974.3	394.8	130.6	7,674.5
1980	1,860.0	4,337.9	3,782.7	488.2	139.5	9,829.4

**Statistical note:* Income, property, real property and total revenue were estimated by single equation regressions on a sample of observations for the period 1953-72, the longest period for which complete data was available. The resulting estimated equations were then used with predicted values of the explanatory variables to forecast revenues under the three income growth assumptions.
The sales tax is too new for meaningful regression analysis and was forecast using an assumed income elasticity of 1.0. The cigarette tax was similarly forecast, assuming an elasticity of 0.3.

The sample period included major tax changes. Variables were included in several equations to capture the effect of the introduction of the sales tax in 1966 and of major tax revisions in 1971.

Property tax rate increases in recent years are not explicitly allowed for in the model. To the extent that the property and real property tax equations' estimates reflect the influence of these rate changes, they implicitly assume a continuing policy of property tax rate increases except as growth of the property base is rapid enough to obviate the need for rate increases.

Revenue Potentials

The Income Tax

BEST COPY AVAILABLE

(Note: Revenue amounts given on this and the following two pages are based on 1974 income, rates and tax collections, without allowance for possible adverse effects of a higher tax on the amount of taxable income.)

Each 1% of the present tax on "earned" income = $166 million

Each 1% of the present tax on "unearned" income = $14.4 million

The $2,000 personal exemption now given each taxpayer costs the state over $200 million in lost revenue.

Lowering the exemption to $750 (federal level) = $120 million

Raising the exemption to $2,500 = $50 million loss

A graduated income tax has often been advocated as a source of more state revenue. Whether or not it yields more revenue than the present tax depends on the rates, exemptions and deductions that the Legislature chooses.

Such a tax would require an amendment of the State Constitution. At the earliest, it could not be made to yield a full year's revenue before fiscal 1978. It is not an immediately available alternative source of revenue.

Graduated income tax amendments have been rejected by Massachusetts voters in 1962, 1968 and 1972, by decreasing margins.

Under a broadly worded amendment the Legislature could enact a graduated tax based on:

1. A percent of the federal income tax liability, with necessary minor adjustments (as in Vermont); often called a "piggyback" tax.
2. A graduated scale of rates applied to federal-defined taxable income, with necessary minor adjustments; or
3. A graduated scale of rates applied to state-defined taxable income.

Advocates of the graduated tax argue that it would be more equitable by treating all income alike, regardless of source, and by being more progressive in its incidence (or less regressive after taking federal deductions into account).

Opponents have argued that a graduated tax designed to produce more revenue would seriously harm the Massachusetts economy and, if based on the federal income tax, would tie Massachusetts to a federal law with many flaws and future uncertainties.

The only study[1] of the incidence of various tax alternatives in Massachusetts found relatively little difference in progressivity between the present income tax and a "piggyback" tax on the federal tax to produce the same amount of money.

In fiscal 1974 a "piggyback" tax of 26% of each taxpayer's federal income tax would have raised about the same amount of money as the present tax.

A payroll tax — on gross salaries and wages — also has been proposed from time to time, particularly as a local (municipal or regional) tax.

Each 1% of tax on all Massachusetts payrolls = $200 million

Proponents of such a tax point to its broad base, its proportional incidence, its high yield, and the certainty and ease of its collection. As a municipal tax, they point to its advantages for a central city seeking to meet the costs of servicing non-residents.

Apart from its doubtful constitutionality as a local tax, opponents argue that it discriminates against employed persons and in favor of the self-employed, annuitants and those with income derived from property. They also observe that a general income tax can be designed to do anything that a payroll tax can do.

Income tax credits may be used in a variety of ways to offset the regressive effects of other taxes or to shift the burden from one tax to another. Most often they are used, as in Massachusetts, to offset the sales taxes paid by lower income persons in purchasing necessities of life.

With increasing frequency, credits are also being used in "circuit-breaker" plans as a way of reimbursing lower-income persons for some part of their local property taxes, and at the same time shifting the cost from local to state government.

The present cost to Massachusetts for sales tax credits, including the direct payments to those not liable for income taxes, is about $3 million. Many persons entitled to such credits, however, are failing to obtain them.

[1] Edward Moscovitch, "State Graduated Income Taxes — A State-Initiated Form of Federal Revenue Sharing," *National Tax Journal*, March, 1972

Revenue Potentials

The Sales Tax

BEST COPY AVAILABLE

The present narrow-based Massachusetts "limited" sales tax yielded $258 million in fiscal 1974. It applies only to sales (or use) of certain *tangible personal property*.

Each 1% of the present 3% tax = $86 million

Various ways have been proposed of broadening the tax, with the following estimated effects on revenue — assuming the continuance of the present 3% rate.

Including:

- Food = **$140 to $150 million**
- All clothing = **$20 to $36 million**
- Selected services, such as hairdressing, automotive repairs, stenography, etc. (1971 proposal) = **$70 million**
- Household fuel and utilities = **$30 to $50 million**
- Prescription medicine = N.A.
- Total price of automobiles (eliminate trade-in allowance) = **$15 million**
- Machinery used in manufactures = N.A.
- Presently taxed sales (additional tax on gasoline, meals, rooms, alcoholic beverages, etc.) = **$200 million**

In each of these cases (except machinery) the adverse effect on individual consumers with low incomes could be offset by appropriate income tax credits, as discussed previously.

The additional cost to corporate taxpayers would have to be considered in terms of the state's current economic situation and the recent trend toward more tax encouragement for industry.

Among the most inclusive of the general sales taxes now in effect are those in Georgia, New Mexico and Utah. The yield of the Massachusetts tax would be greatly increased by using the broader bases used in any of these three states. It is estimated, for example, that the Georgia tax, applied to Massachusetts at the current 3% rate, would yield as much as *$750 million*.

Revenue Potentials

Other Taxes

BEST COPY AVAILABLE

General Surtaxes
Massachusetts has twice used across-the-board surtaxes on existing taxes as a means of increasing revenue — once in the 1940's, a surtax reaching 23% on the principal taxes, and again in 1969, a surtax of 14% on most taxes (except income, sales, cigarettes and gasoline).

A surtax of 10% on all present state taxes = **$213 million**

Gasoline
The gasoline tax is currently available only for highway-related and mass transportation purposes.

Each 1¢ of the 7½¢ per gallon gasoline tax = **$24 million**

Strict enforcement of the companion tax on diesel fuel — identical to #2 fuel oil and therefore difficult to police — could probably raise several million dollars additional.

Corporation Excise
This is the general tax on business and manufacturing corporations.

Each 1% of the 8.55% tax on corporate income = **$20.8 million**

Each $1 per $1,000 of tangible property value = **$10.5 million**

The corporation excise is in process of being reduced through a systematic rollback of the tangible property rate, enacted in 1970.

Meals
A 1% increase in the present 5% tax rate = **$10.9 million**

This tax, which is no longer earmarked for Old Age Assistance, applies to meals costing $1 or more and all alcoholic beverages served on the premises.

Cigarettes
Each 1¢ of the present 16¢ per pack tax on cigarettes = **$7.2 million**

Alcoholic Beverages
A 10% increase in the various rates of tax = **$6.5 million**

Inheritance
The tax on inheritances and estates is assessed at various rates and with various exemptions, according to degree of kinship.

A 10% increase in the present rates = **$6 to $7 million**

The yield of this tax varies unpredictably from year to year.

Banks
An overall increase of 10% in the rates of taxes on commercial banks (as limited by law), savings banks and other thrift institutions = **$3.3 million**

Racing
A 10% increase in the rates of this tax = **$3.2 million**

Room Occupancy
A 1% increase in the present 5.7% rate = **$1.4 million**

Public Utilities
A 1% increase in the present 6.5% rate = **$1.1 million**

Insurance
A 10% increase in the present tax (2.28%) on premium income = **$4 million**

A 10% increase in the excise on life insurance and savings bank insurance (including the new tax on investment income of domestic life insurance companies) = **$3 million**

Taxes on life insurance companies are subject to reciprocal provisions which will penalize Massachusetts companies doing business in other states if the Massachusetts rate is increased.

Deeds
A 10% increase in the rate of this tax = **$0.8 million**

Considering the relatively small revenue derived from the majority of Massachusetts taxes, and the economic constraints on the rate levels of several of them, it is apparent that only the broadest-based taxes can supply significant amounts of additional revenue.

Illustrative Tax Programs for Local-Aid

Program A: $200 million

Six ways to reduce local taxes by an average 8 percent or $3.50 per $1000 EV[1]

- Surtax of 10% on all state taxes

or

- Increase sales tax rate: 3% to 5½%
(Double low-income credits)

or

- Increase sales tax rate: 3% to 4%
Broaden sales tax base: all clothing, selected services, total automobile price
(Double low-income credits)

or

- Increase income tax rates: Earned, 5% to 5½%; Unearned, 9% to 9½%
Increase sales tax rate: 3% to 4½%
(Increase low-income credits by half)

or

- Increase income tax rates: Earned, 5% to 6%; Unearned, 9% to 10%
Increase corporation income tax: 8.55% to 9.5%

or

- Broaden sales tax base to include all sales now taxed selectively (additional)

Program B: $400 million

Five ways to reduce local taxes by an average 16 percent or $7.00 per $1000 EV[1]

- Surtax of 20% on all state taxes

or

- Increase sales tax rate: 3% to 6%
Tax all clothing and selected services
(Triple low-income credits)

or

- Increase income tax rates: Earned, 5% to 6%; Unearned, 9% to 10%
Increase sales tax rate: 3% to 5½%
(Double low-income credits)
Increase corporation income tax: 8.55% to 9.5%

or

- Increase income tax rates: Earned, 5% to 6%; Unearned, 9% to 10%
Increase sales tax rate: 3% to 4%
(Increase low-income credits by half)
A 6% surtax on all other taxes

or

- Adopt a general retail sales tax on sales of tangible property and services (Georgia type) at 3% rate
(Triple low-income credits)

[1] Equalized Valuations (EV) are the official state estimates of the full and fair cash value of taxable property in each city and town.

State and Local Taxes in Perspective

BEST COPY AVAILABLE

The concern of every student of Massachusetts taxes, and indeed of the Massachusetts Advisory Council on Education in initiating this study, has been the overworked Massachusetts property tax and its inability, at present levels, to support schools and other services equitably.

The problem of the Massachusetts property tax is twofold: it is too large in the aggregate; and it is uneven in its burden among cities and towns, tending to leave communities having the greatest needs with the smallest resources to meet them.

In the 12 months ending June 30, 1974, property tax assessments totaled about $2.2 billion. The State Tax Commission has estimated that the full value of all taxable property in the state as of January 1, 1974, was $57.8 billion — a figure which may be reduced a little as several valuation appeals are decided.

In total, therefore, the full-value rate of taxes on Massachusetts property was about $38 per $1,000.

A uniform, statewide rate of $38, though very high in comparison with other states, might nevertheless be considered tolerable, at least by those now saddled with much higher rates. The actual distribution of the local tax burden, however, is generally agreed to be unacceptable.

Numerous steps have been taken since World War II to even out this burden — notably:

- The expanded equalizing Chapter 70 School Aid
- The equalizing municipal grants (lottery distribution)
- The state assumption of welfare costs which most helped the low-income, high-tax communities
- The ending of distributions of state-collected taxes (income tax, corporation tax, highway fund, machinery distribution) *in direct proportion to equalized valuations* — on a return-to-source principle. Until recently these distributions have cancelled out the intended equalizing effects of school aid formulas.

Despite these steps the disparities in local rates remain great.

A number of small towns, especially on the shore and in the Berkshire Hills, have full-value tax rates (based on the 1974 valuation estimates) in the neighborhood of $10 per $1,000. Lowest of all is Rowe with a $6 rate.

On the other hand, full-value rates exceed $50 in numerous older cities and towns, with Chelsea's $88 rate the highest.

Most proposals to provide more help for the cities and towns have had, at least implicitly, three objectives:

First, to shift more of the tax burden from local to state tax sources;

Second, to equalize local tax burdens; and

Third, particularly with respect to school aid programs, as a financial incentive, to raise standards of public service throughout the state.

The original proposal of the Master Tax Plan Commission was addressed only to the first two of these objectives. It aimed to lower the share of state and local taxes borne by property to 40 percent from the then 54 percent, shifting the burden largely to sales taxation. And it aimed to equalize local tax burdens by assessing property taxes, ultimately, at a uniform, statewide rate measured by local needs.

In fiscal 1974, the general property tax share of all taxes was 51 percent. Motor vehicle excises, often considered property taxes, accounted for another 4 percent.

To achieve the Commission's goal of a 40 percent property tax share, assuming no reduction of municipal spending, would have required in fiscal 1974 a shift of $475 million to non-property sources.

As long as the problem of equalizing local tax burdens is approached incrementally — that is, by providing each city and town with additional money according to its measured needs and ability to pay — rather than by directly assessing the wealthy community for the benefit of the poor one as Maine and other states have recently done, it is fiscally impossible to eliminate the disparities in local taxes.

Some Other Recent Reports of The Massachusetts Advisory Council On Education

BEST COPY AVAILABLE

Title	Author	Where Available
Effectiveness, Efficiency and Equal Opportunity	Governor's Commission on School District Organization	MACE
Aid to Private Higher Education in Massachusetts	Frederick E. Terman	MACE
Higher Education in Massachusetts: A New Look at Some Major Policy Issues	Academy for Educational Development	MACE Summary Only
Strengthening the Alternative Post-Secondary Education System: Continuing and Part-Time Study in Massachusetts	University Consultants, Inc.	MACE 4-page Summary Only
Something of Value (Summary) and Elementary Science Handbook	Office of Instructional Research and Evaluation Harvard University	MACE
The Here, Now and Tomorrow of Cable Television in Education . . . A Planning Guide	Creative Studies, Inc.	MACE
Modernizing School Governance for Educational Equality and Diversity	Paul W. Cook, Jr.	MACE
Massachusetts Schools: Past, Present and Possible	Richard H. de Lone	MACE
Child Care in Massachusetts: The Public Responsibility	Richard R. Rowe	ERIC ED #065-174 (full)
A Systems Approach for Massachusetts Schools: A Study of School Building Costs	Campbell, Aldrich & Nulty	ERIC ED #060 531 (full) ED #060 530 (summary)
Organizing an Urban School System for Diversity	Joseph M. Cronin	D. C. Heath Publishing Co. Lexington, MA
Continuing Education in Massachusetts: State Programs for the 70's	Melvin Levin Joseph Slavet	D. C. Heath Publishing Co. Lexington, MA
Guidelines for Planning and Constructing Community Colleges	Bruce Dunsmore	ERIC ED #034 390
Pupil Services for Massachusetts Schools	Gordon Liddle and Arthur Kroll	ERIC ED #037 767
Take a Giant Step: Evaluation of Selected Aspects of Project 750	Herbert Hoffman	ERIC ED #061 695
Teacher Certification and Preparation in Massachusetts	Lindley J. Stiles	ERIC ED #027 243

BEST COPY AVAILABLE

A list of other MACE projects underway at the time of this printing

Special Education Collaboratives – developing recommendations and resource materials needed to promote collaboratives under Chapter 766.

Finance Reform – developing recommendations on the basis of relating equalization principles to attitudes and opinions of political and educational leaders.

Citizen Participation – developing resource materials and alternatives to promote positive citizen involvement in educational decision making.

Student Records – assisting the Department of Education in developing regulations and guidelines governing school records.

Elementary Science – assisting interested school districts in evaluating and improving elementary science programs.

Vandalism – developing resource materials for school districts interested in designing and maintaining school buildings to reduce damage from vandalism.

Urban Reading Programs – analyzing factors that influence the degree of success achieved by urban school reading programs.

High School Diplomas – defining and proposing a statewide system for flexibility and control of quality of student achievement in awarding high school diplomas.

Schools And The Elderly – defining and proposing actions to promote mutually beneficial relationships between the elderly and schools/colleges.

College Teaching – defining and proposing actions to assist college and universities in their design of systems for evaluating and improving teaching practices on the college level.